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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,821	02/17/2000	Victor Leroy Babbitt	391331	7737

7590

02/03/2004

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EXAMINER
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ARANI, TAGHI T

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 02/03/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/505,821

Applicant(s)

BABBITT ET AL.

Examiner

Taghi T. Arani

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 1/222/202.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 15 and 24 is/are rejected.
- 7) ☒ Claim(s) 12 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

Claims 1-24 were pending for examination.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-11, 13-15, 20-22** rejected under 35 U.S.C. 103(a) as being unpatentable over Challenger, US pat. No. 6, 081,793 and Brundridge, US Pat. No. 6,279,109, filed Jan 1999 and further in view of "A Report on the Feasibility of Internet Voting", California Internet Voting Task Force, issued January 2000.

**As per claim 1-3, 13-15,20, 22,** Challenger is directed to a method and system for improved electronic voting wherein a voter is provided a smart card (i.e. a memory medium) to be placed in a card reader in communication with a data processing (i.e. voter client) under the control of the voter, see col. 7, lines 38-44.

Challenger teaches an electronic voting (through an internet connection) where a voter client (i.e. a data processing system) compares a PIN number entered by the voter to the PIN number read utilizing the smart card reader, see col. 7, lines 45-47. Challenger teaches that if the identification appears to be authentic, an authentication server selects a ballot ID for the ballot and sends the ballot ID to the voter's personal computer (i.e. voter client), see col. 8, lines 1-8, and that the voter completes the ballot and the voter uses the voter's PC to create a cryptolope, and sends it to a journal server, see col. 8, lines 10-18. That is, the teaching of Challenger clearly suggests an exclusive execution of program instructions utilizing the smart card during the

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performance of an election .That is, “excepting device drivers” is inherent in Challenger’s execution of program instructions for general purpose voter’s PC, see col. 3, lines 60-65 .

Challener fails to teach that the memory medium (or smart card) operably configured to boot the voter client.

However, Brundridge teaches a computing system and operating method executable on a target processor (i.e. voter client) which bootstrap loads and run an application program or interface (such as executable program instructions) from an alternative medium, for example a CD-ROM medium or via network link, see abstract.

Brundridge’s method bootstrap loads and runs interface (GUI) from a CD-ROM medium when an operating system associated with the application program or interface is not installed on the target computer (i.e. expecting device driver), see col. 4, lines 22-33.

Brundridge’s bootable CD-ROM enables a user to run an application program or graphical user interface to perform operations including running diagnostics and executing system setup, see col. 1, lines 539-53.

It would have been obvious to one of ordinary skill in the art to bootstrap loads the voter’s PC of Challenger with that of Brundridge to mitigate the problem arising in computer systems due to compatibility of various software resources in a particular hardware configuration, see Brundridge, col. 1, lines 39-63.

It would have been further obvious to one of ordinary skill in the art to place the program instructions of the Challenger on a read only medium configured to bootstrap loads the voter’s PC, because potential attacks on computer software , such as destructive “viruses” or “Trojan horse” software , create a serious threat to Internet voting and that unique operating system and web browser (i.e. an exclusive program instructions) software would minimize the potential

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technological threats to internet voting, see California Internet Voting Task Force, Page 4 under Technical Issues.

**As per claim 4**, Challenger teaches an authentication server, see col. 8, lines 10-18, operatably configured for internet communication s with the voter client, see col. `7, lines 53-59.

**As per claim 5**, Challenger teaches means for providing multiple layer authentication such as voter's name, address, voter registration number, social security number, driver's license number, or any other identifying data, see col. 7, lines 53-59.

**As per claims 6 - 9**, Brundridge teaches that in building bootable operating system compact disk (CD) a file management tools is used to move files that are to be accessed from a CD-ROM to another directory structure so that the underlying registry of the operating system is appropriately modified, see col. 6, lines 19-58, and that the moved files are substantially recorded onto a CD-ROM medium to create a bootable CD-ROM.

That is, Brundridge teaches creating and copying the system directory to an alternative directory (startup disk) which creates an operating system image that is subsequently transferred to an alternative medium (CD) . That is, after the operating system elements are copied to the alternative directory, unnecessary directories and files are removed leaving virtual device drivers , DLLs, registry files and desired executable that are required on a read/writeable media (i.e. a floppy start up disk) by designation of operating system design, see col. 8, lines13-47, see also col. 10, lines 11-32.

**As per claims 10-11, 21 and 24**, Challenger teaches an electronic voting (i.e. through an internet connection) where a voter client (i.e. a data processing system) operating as an "internet client", see col. 7, lines 38-54.

Challener teaches a voter smart card which includes voter identification, a public key associated that particular voter identification, a public key of an internet precinct which is provided as an option to the voter should he or she elect to vote via electronic means utilizing the internet or any other novel or conventional data communication system, col. 3, lines 9-29, and that all information contained in the smart cards is passed to an authentication server and optionally to a trusted service provider.

That is, the numerical server address for use in providing a sponsored internet connection is inherent in the data processing system operating as an "internet client" taught by Challener, see also col. 7, lines 39-58.

Challener further teaches a plurality of voters (voter clients) who are each issued an individual "smart card" which are utilized during voting, see col. 3, lines 1-9, and that each voter is assigned "public key of internet precinct" (see Fig.2A). The teaching of Challener's electronic voting clearly suggests that a group of Internet Precincts (with a group of internet addresses) are distributed among a plurality of client's smart cards utilized by voters.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 13-19** are rejected under 35 U.S.C. 102(e) as being anticipated by Brundridge, US Pat. No. 6,279,109, filed Jan 1999.

**As per claims 13-15**, Brundridge teaches a computing system and operating method executable on a target processor (i.e. voter client) which bootstrap loads and run an application program or interface (such as executable program instructions) from an alternative medium, for example a CD-ROM medium or via network link, see abstract.

Brundridge's method bootstrap loads and runs interface (GUI) from a CD-ROM medium when an operating system associated with the application program or interface is not installed on the target computer (i.e. expecting device driver), see col. 4, lines 22-33.

Brundridge's bootable CD-ROM enables a user to run an application program or graphical user interface to perform operations including running diagnostics and executing system setup. That is, verifying system device drives to assure that the drivers are not corrupted.

**As per claims 16-19**, Brundridge teaches that in building bootable operating system compact disk (CD) a file management tools is used to move files that are to be accessed from a CD-ROM to another directory structure so that the underlying registry of the operating system is appropriately modified, see col. 6, lines 19-58, and that the moved files are substantially recorded onto a CD-ROM medium to create a bootable CD-ROM.

That is, Brundridge teaches creating and copying the system directory to an alternative directory (startup disk) which creates an operating system image that is subsequently transferred to an alternative medium (CD) . That is, after the operating system elements are copied to the alternative directory, unnecessary directories and files are removed leaving virtual device drivers , DLLs, registry files and desired executable that are required on a read/writeable media (i.e. a floppy start up disk) by designation of operating system design, see col. 8, lines 13-47, see also col. 10, lines 11-32.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 20-21** are rejected under 35 U.S.C. 103 (a) as being unpatentable over Brundridge, US Pat. No. 6,279,109, filed Jan 1999 and further in view of “ A Report on the Feasibility of Internet Voting”, California Internet Voting Task Force, issued January 2000.

Brundridge’s bootable operating system compact disk (CD) is suitable for bootstrap loading of a first operating system on a processor (such as voter client) even though the processor is running a second operating system that does not allow writing to persistent storage by the first operating system.

The examiner asserts that it would have been an obvious choice to use Brundridge’s bootable CD in a voter client to provide voters with a single-use clean operating system and web browser for voting in a remote internet voting from any internet connection, see California Internet Voting Task Force, Page 14 .

It would have been further obvious to one of ordinary skill in the art to place the program instructions of on a read only medium configured to bootstrap loads the voter’s PC, because potential attacks on computer software , such as destructive “viruses” or “Trojan horse” software , create a serious threat to Internet voting and that unique operating system and web browser (i.e. an exclusive program instructions) software would minimize the potential technological threats to internet voting, see California Internet Voting Task Force, Page 4 under Technical Issues.

***Allowable Subject Matter***



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Claims 12 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

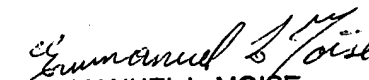
Any inquiry concerning this communication or earlier communications from examiner should be directed to Taghi Arani, whose telephone number is (703) 305-4274. The examiner can normally be reached Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh, can be reached at (703) 305-9648. The Fax numbers for the organization where this application is assigned is:

(703) 872-9306

Taghi Arani

Patent Examiner

  
EMMANUEL L. MOISE  
PRIMARY EXAMINER  
A/C 2136